What is claimed is:

1. An autonomous robot comprising:

a system for moving the robot over a surface;

a power system for providing power to the robot, the power system including at least one sensor for detecting power levels; and

a control system in communication with the moving system, and the power system, the control system including a processor programmed to:

monitor the power level of the power system;

initiate a docking process for the robot to return to a docking station when the power level has fallen to a first a predetermined level; and

continue the docking process by causing the robot to move toward the docking station.

2. The robot of claim 1, wherein the processor is additionally programmed to:

continue the docking process until the power level has fallen to a second predetermined level, the second predetermined level being less than the first predetermined level.

3. The robot of claim 2, wherein the processor programmed to continue the docking process includes: causing the robot to move into contact with the docking station.

4. The robot of claim 2, wherein the processor is additionally programmed to cause the robot to stop if the power level has fallen to at least the second predetermined level.

5. The robot of claim 1, additionally comprising: at least one sensor for detecting a docking beam, the at least one sensor in communication with the control system and wherein, the processor is additionally programmed to: cause the robot to seek a docking beam from a docking station by detecting it through the at least one sensor.

6. The robot of claim 5, wherein the processor programmed to seek a docking beam from a docking station includes: receiving a first signal from the at least one sensor that docking beam has been detected and receiving a second signal from the at least one sensor confirming the detection of the docking beam.

7. The robot of claim 6, wherein the at least one sensor includes a plurality of sensors.

8. The robot of claim 7, wherein said plurality of sensors include infrared light receivers.

9. The robot of claim 1, additionally comprising, electrical contacts in communication with the power system and the control system for contacting corresponding contacts on a docking station and receiving electricity therethrough for charging the power system.

10. The robot of claim 9, wherein the power system includes at least one battery.

11. The robot of claim 4, wherein the processor programmed to continue the docking process includes: causing the robot to move toward an obstacle.

12. The robot of claim 11, wherein the processor programmed to continue the docking process includes: causing the robot to move along the obstacle to a point proximate the docking station.

13. The robot of claim 12, wherein the processor programmed to continue the docking process includes: causing the robot to perform at least one wiggle movement toward the docking station.

14. The robot of claim 3, wherein the processor programmed to continue the docking process is additionally programmed to: cause the docking process to terminate and cease movement of the robot when a signal corresponding to a docking contact with a docking station is made.

15. The robot of claim 1, wherein the processor programmed to monitor the power level of the power system includes monitoring battery voltage.

16. The robot of claim 1, configured for vacuum cleaning.

17. The robot of claim 1, configured for lawn mowing.

18. A docking station for an autonomous robot comprising:

at least one transmitter for transmitting a docking beam, the docking beam including at least a first portion of a first range and a second portion of a second range; and

at least one contact member configured for receiving a corresponding contact member on a robot in a docking contact.

19. The docking station of claim 18, additionally comprising:

a charging system for transporting electricity to the robot when the docking contact is made.

20. The docking station of claim 18, wherein the first range is a short range transmission.

21. The docking station of claim 18, wherein the first range is a long range transmission.

22. An autonomous robot comprising:

a system for moving the robot over a surface;

at least one sensor for detecting a signal for a docking station;

a power system for providing power to the robot, the power system including at least one sensor for detecting power levels; and

a control system in communication with the moving system, the at least one sensor for detecting the docking station signal, and the power system, the control system including a processor programmed to:

monitor the power level of the power system;

initiate a docking process for the robot to return to a docking station when the power level has fallen to a first a predetermined level;

continue the docking process by:

receiving at least one signal from the at least one sensor that a signal for a docking station has been detected; and

responding to the received at least one signal by causing the movement system to move the robot toward the docking station.

23. The robot of claim 22, wherein the processor is additionally programmed to:

continue the docking process until the power level has fallen to a second predetermined level, the second predetermined level being less than the first predetermined level.

24. The robot of claim 23, wherein the processor programmed to continue the docking process includes: causing the robot to move into contact with the docking station.

25. The robot of claim 23, wherein the processor is additionally programmed to cause the robot to stop if the power level has fallen to at least the second predetermined level.

26. The robot of claim 22, wherein said receiving at least one signal includes receiving a first signal from the at least one sensor that a signal for a docking station has been detected and a second signal from the at least one sensor confirming the detection of the signal for a docking station.

27. The robot of claim 22, additionally comprising, electrical contacts in communication with the power system and the control system for contacting corresponding contacts on a docking station and receiving electricity therethrough for charging the power system.

28. The robot of claim 22, wherein the power system includes at least one battery.

29. The robot of claim 23, wherein the processor programmed to continue the docking process includes: causing the movement system of robot to move toward an obstacle.

30. The robot of claim 29, wherein the processor programmed to continue the docking process includes: causing the robot to move along the obstacle to a point proximate the docking station.

31. The robot of claim 30, wherein the processor programmed to continue the docking process includes: causing the robot to perform at least one wiggle movement toward the docking station.

32. The robot of claim 23, wherein the processor programmed to continue the docking process is additionally programmed to: cause the docking process to terminate and cease movement of the robot when a signal corresponding to a docking contact with a docking station is made.

33. The robot of claim 22, wherein the processor programmed to monitor the power level of the power system includes monitoring battery voltage.

34. The robot of claim 22, configured for vacuum cleaning.

35. The robot of claim 22, configured for lawn mowing.

36. The robot of claim 22, wherein the at least one sensor includes a plurality of sensors.

37. The robot of claim 36, wherein said plurality of sensors include infrared light receivers.

38. A method for docking an autonomous robot in a docking station comprising:
monitoring battery voltage of the robot;

initiating docking of the robot in the docking station when the battery voltage has been detected to have fallen to a first predetermined level;

locating at least one signal for the docking station; and

while the battery voltage remains between the first predetermined level and a second predetermined level, the second predetermined level less than the first predetermined level, moving the robot toward the docking station.

39. The method of claim 38, additionally comprising:

ceasing movement of the robot when the battery voltage has fallen to at least the second predetermined level.

40. The method of claim 38, wherein the locating at least one signal for the docking station includes seeking and detecting a signal from the docking station and detecting the signal from the docking station for a second time.

41. The method of claim 38, wherein moving the robot toward the docking station includes: moving the robot toward an obstacle.

42. The method of claim 41, wherein moving the robot toward the docking station includes: moving the robot along the obstacle to a point proximate the docking station.

43. The method of claim 42, wherein moving the robot toward the docking station includes: the robot performing at least one wiggle movement toward the docking station.

44. The method of claim 38, wherein moving the robot toward the docking station includes terminating movement of the robot when the robot has reached the docking station and is in docking contact with the docking station.

45. The method of claim 44, wherein the docking contact includes electrical contact between the robot and the docking station, this electrical contact facilitating electricity for moving from the docking station to the robot for charging at least one battery in the robot.

46. The method of claim 44, additionally comprising: the robot performing vacuuming.

47. The method of claim 44, additionally comprising, the robot performing lawn mowing.

48. A method for docking an autonomous robot in a docking station comprising:

monitoring battery voltage of the robot;

initiating docking of the robot in the docking station when the battery voltage has been detected to have fallen to at least a first predetermined level;

locating at least one signal for the docking station and confirming that the at least one signal for the docking station has been located; and

while the battery voltage remains between the first predetermined level and a second predetermined level, the second predetermined level less than the first predetermined level,

moving the robot toward the docking station.

49. The method of claim 48, additionally comprising:

ceasing movement of the robot when the battery voltage has fallen to at least the second predetermined level.

50. The method of claim 48, wherein moving the robot toward the docking station includes: moving the robot toward an obstacle.

51. The method of claim 50, wherein moving the robot toward the docking station includes: moving the robot along the obstacle to a point proximate the docking station.

52. The method of claim 51, wherein moving the robot toward the docking station includes: the robot performing at least one wiggle movement toward the docking station.

53. The method of claim 48, wherein moving the robot toward the docking station includes terminating movement of the robot when the robot has reached the docking station and is in docking contact with the docking station.

54. The method of claim 53, wherein the docking contact includes electrical contact between the robot and the docking station, this electrical contact facilitating electricity for moving from the docking station to the robot for charging at least one battery in the robot.

55. The method of claim 48, additionally comprising: the robot performing vacuuming.

56. The method of claim 48, additionally comprising, the robot performing lawn mowing.